

EXPRESS MAIL MAILING LABEL  
No. EV926975106US



PATENT  
Attorney Docket No. INL-059

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: Shin *et al.* CONF. NO.: 1711  
SERIAL NO.: 10/625,984 GROUP NO.: 1753  
FILING DATE: July 24, 2003 EXAMINER: Noguerola, A.S.  
TITLE: Aqueous Solutions For Reducing The Rate Of Oxygen Loss, And  
Methods Thereof

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**DECLARATION OF SOHRAB MANSOURI UNDER 37 C.F.R. § 1.131**

Dear Sir:

I, Sohrab Mansouri, of 34 Anselm Way, Sudbury, Massachusetts, declare and state that:

1. Jungwon Shin, Dennis Conlon, and I are the named inventors of the subject matter described and claimed in the above-identified patent application, i.e., United States Patent Application Serial No. 10/625,984, filed July 24, 2003, which claims the benefit of United States Patent Application Serial No. 60/398,661, filed July 26, 2002.
2. Prior to making this declaration, I have reviewed the following documents:
  - (a) claims 1-55 as originally filed in the above-identified patent application,
  - (b) its priority application, United States Patent Application 60/398,661; and
  - (c) U.S. Patent Application Publication No. 2003/0062262, which was cited as prior art under 35 U.S.C. § 102(e) by the Examiner in the present application.
3. I make this Declaration to establish invention of the subject matter of claims 1-55 prior to the effective filing date of U.S. Patent Application Publication No. 2003/0062262, filed August 22, 2002, which claims the benefit of United States Patent Application 60/314,267, filed August 22, 2001.

4. At least prior to August 22, 2001, Jungwon Shin, Dennis Conlon and I conceived of and reduced to practice a method of reducing the rate of loss of oxygen content in a solution by adding choline to the solution, and optionally using a sealed container for storing the choline-containing solution. This was a reduction to practice of the subject matter of at least independent claims 1, 19, and 38.

5. In support of the prior invention date asserted in paragraphs 3 and 4, I attach as Exhibit A a redacted Invention Disclosure signed by each of Jungwon Shin, Dennis Conlon, and myself in the presence of our witness Paul D'Orazio, which confirms conception of, as well as constructive and actual reduction to practice of, the claimed solution, container, and method recited in claims 1, 19, and 38, respectively, prior to August 22, 2001.

6. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. Furthermore, these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

1-19-07  
Date

  
Sohrab Mansouri

EXHIBIT A

EXPRESS MAIL MAILING LABEL  
No. EV926975106US



Instrumentation  
Laboratory

## INVENTION DISCLOSURE

### INVENTORS

MELANIE SHIN  
SOHRAB MANSOURI  
DENNIS CONLON

### DESCRIPTIVE

### TITLE OF INVENTION

*ADDITION OF CHOLINE CHLORIDE TO CALIBRATION SOLUTIONS  
FOR THE REDUCTION OF OXYGEN DECAY*



## INVENTION DISCLOSURE

INVENTORS: MELANIE SHIN  
SOHRAB MANSOURI  
DENNIS CONLON

DESCRIPTIVE

TITLE OF

INVENTION: *Addition of Choline Chloride to Calibration Solutions  
for the Reduction of Oxygen Decay*

### DESCRIPTION OF INVENTION

Our recent study found that choline chloride added to the calibration solution significantly reduced oxygen decay rates.

Melanie Shin  
Sohrab Mansouri  
Dennis Conlon

*Melanie Shin* ..... Date:  
*Sohrab Mansouri* ..... Date:  
*Dennis Conlon* ..... Date:

Read, understood and witnessed by: *J. And... D. C. T. y... D. C. T. y...* Date:

Figure 1 shows oxygen decay rates of bags with and without choline chloride. Figure 2 shows oxygen decay rates of bags with and without choline chloride in the presence of heparin, which is known to increase oxygen decay rates. In both cases, choline chloride greatly reduced oxygen decay rates.

Based on the conclusion above, the invention of adding choline chloride to calibration solutions to reduce oxygen decay rate is claimed in this patent disclosure. The invention is applicable to any calibration solutions or quality control solutions contained in a sealed bag.

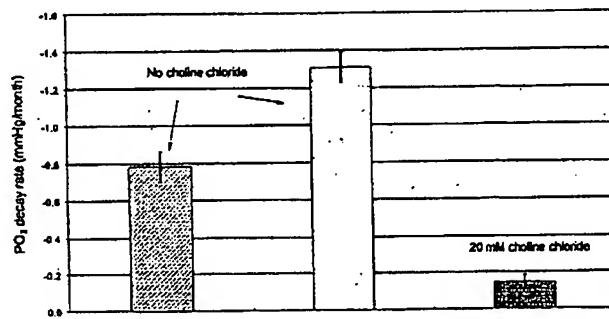


Figure 1. Oxygen decay rates of bags with and without choline chloride. Rate is an average of three bags within a lot and based on six-month shelf life. Error bar represents standard deviation of three bags.

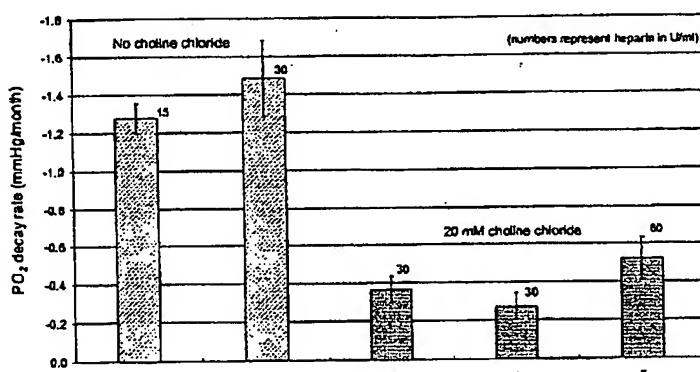


Figure 2. Oxygen decay rates of bags with and without choline chloride in presence of various amounts of heparin.

Melanie Shin  
Sohrab Mansouri  
Dennis Conlon

*Melanie Shin* ..... Date:  
*Sohrab Mansouri* ..... Date:  
*Dennis Conlon* ..... Date:

Read, understood and witnessed by: *and D. O.* ..... Date:



Melanie Shin  
Sohrab Mansouri  
Dennis Conlon

..... *Melanie Shin* ..... Date:  
..... *Sohrab Mansouri* ..... Date:  
..... *Dennis Conlon* ..... Date:

Read, understood and witnessed by: *Paul D'Argy* ..... Date: